REMARKS

Claims 1 to 14 continue to be in the case.

New claims 15 to 24 are introduced.

New claim 15 is based on the language of claim 1.

New claim 16 is based on the language of claim 2 and on US Patent Application Publication 2007/0246324 A1, paragraph [19].

New claim 17 is based on the language of claim 3 and on US Patent Application Publication 2007/0246324 A1, paragraph [19].

New claim 18 is based on the language of claim 4 and on US Patent Application Publication 2007/0246324 A1, paragraph [19].

New claim 19 is based on the language of claim 5.

New claim 20 is based on the language of claim 6.

New claim 21 is based on the language of claim 7.

New claim 22 is based on the language of claim 8 and on US Patent Application Publication 2007/0246324 A1, paragraph [17].

New claim 23 is based on the language of claim 9 and on US Patent Application Publication 2007/0246324 A1, paragraph [18].

New claim 24 is based on the language of claim 13.

The Office Action refers to the Specification.

1. The disclosure is objected to because of the following informalities:.

(a) This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required. Abstract is also objected to for clarity to properly print.

Applicant is submitting an Abstract of the Disclosure on a separate page with this amendment.

(b) The claims are required to begin with a separate sheet of paper.

Appropriate

correction is required.

Applicant is now submitting the claims beginning on a separate sheet of paper.

The Present Invention

The drive device of the present invention is associated with the following advantages: it is no step down gear, no coupled gear, no coupler mechanism, and no cam drive between the output shaft of the DC servo motor and the drive shaft of the barrier element is required. This way the device is capable of reacting quicker and the production costs are lower; there are no interfering noises caused by the gear drive, the drive device runs

nearly without noise, the drive device can be universally employed and can be adapted to different requirements; the parts subject to wear are reduced to an absolute minimum, no parts subject to wear are present in fact with the exception of the two motor bearings, and therefore practically no maintenance work is required (compare also page 4, lines 22 ff of WO 2005/049948 A1). A clear energy-saving results not only by the use of a servomotor but in particular based on the lack of gear friction such that the degree of effectiveness of the device is clearly improved, which is particularly important today for new technologies.

The direct drive according to the present invention furnishes in addition an absolute domination of force, speed and accuracy of position in comparison to known drives. An optimum control of the blocking behavior and of the reversing behavior results therefrom, which increases both the protection of persons as well as also the safety level. Known passage barriers develop a high impact or counter force for example toward the end of the motion of the barrier member, which can represent an increased danger of wounding for a person and in particular for children if they are present in the region of the barrier. This danger can be completely eliminated with the new direct drive; the direct drive allows on the one hand a high blocking or release speed and on the other hand nevertheless a soft

reaching of the positions. In particular, blocking barriers to persons have to be able to react quickly. The closure motion for example to cut off access or passage for unauthorized person without endangering the respective person (WO 2005/049948, p. 2, lines 22 to 28); if a person is disposed in the blocking region, then the closure process has to be interrupted immediately and quickly and be reversed (WO 2005/049948, p. 3, lines 4 to 26). The closure process is to proceed quickly, but is not to end with a hard impact in the final position, instead the final position is to be contacted softly (WO 2005/049948, p. 3, lines 31 to 33). In case of a current failure then the blocking barrier is to be opened automatically (WO 2005/0049948, p. 3, lines 18 and 19).

The Office Action refers to Claim Rejections - 35 USC§ 102

Claims 1,2, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Andersen (US 5,773,943).

Applicant respectfully traverses.

Such a drive device is not known or not obvious in view of anyone of the 4 documents D1, D2, D3, D4 cited in the international preliminary examination report regarding patentability.

With respect to claim 1, Andersen teaches a drive device for passage barriers (abstract) or thoroughfare barriers and door or gate drives, having a brush less DC servo motor, characterized in that the DC servo motor (fig. 2,11) has an associated servo controller (fig. 9,50) and the output shaft (fig. 3, 8) of the DC servo motor is connected directly to the drive shaft (fig. 3,4) of the barrier element.

Applicant respectfully disagrees.

The reference Andersen teaches a drive device for a revolving door and not a drive device for passage barriers.

The reference Andersen in column 7, lines 5 to 8 reads as follows: "FIG. 9 illustrates schematically an embodiment of the invention wherein the operation of the revolving door is controlled by a control unit 50, the control unit 50 preferably including a microprocessor 52 and a frequency converter 54." In contrast, claim 1 of the present application specifies the presence of a servo controller.

The reference Andersen teaches in column 7, lines 25 to 30: "that there is an electromechanical drive unit 10 which consists of an electric motor 11 with a worm gearing 9 connected on the side, and the drive shaft of the rotating part 1 is connected positively and non-positively directly with the worm gearing 9". While the reference Andersen teaches that the worm gearing 9 is disposed between the electric motor 11 and the drive shaft of the rotating part 1, in contrast claim 1 of the present application requires that the output shaft of the brushless DC servo motor is connected directly to the drive shaft of the barrier element (2).

The Office Action rejections are based on document D1 (U.S. patent 5,773,943 to Andersen) and on document D2 (U.S. patent 5,245,258 to Becker et al.). The drive device for a revolving door described in the reference Andersen (U.S. patent 5,773,943) comprises expressly an electric motor 11 with the worm gear 9, wherein the electric motor 11 is placed close to the worm gear on the same horizontal plane and wherein the worm gear 9 is disposed between the motor and the drive shaft 8 of the revolving door. The electric motor 11 together with the worm gear 9 forms the drive device or drive unit 10 (compare for example the reference Andersen column 1, lines 61 to 66, column 5, lines 18 to 21, column 6, lines 21 to 23, column 7, lines 25 and 26, column 10 lines 8 to 11 and lines 15 and 16 and lines 34 to 36 and lines 48 to 51 and lines 60 to 67). In addition, embodiments are described with an additional coupling drive 14, wherein the coupling drive 14 is interposed between the worm here 9 and the drive shaft 8 of the revolving door (compare the reference Andersen column 5, lines 33 to 36 and lines 46 to 49) or with two worm gears 9a, 9b connected in series (reference Andersen, column 4, lines 31 to 33 and column 6, lines 51 to 57), wherein the second worm gear 9b can again be connected to the drive shaft 8 of the revolving door through a coupling gear 14.

A person of ordinary skill in the art can only take from this reference Andersen that at least one gear is required for the drive of the revolving door; there is no location in the Andersen reference suggesting to completely dispense with a gear drive and to connect the output shaft of the motor directly with the drive shaft of the revolving door. The figures 2,3,9 of the Andersen reference referred to by the office action also contain the worm gear 9, or, respectively, 9a and 9b and the coupling drive 14 together with their reference characters. The reference Andersen mentions in column 7, line 14 that the drive motor can be for example a brushless DC electric motor. This brushless DC electric motor however is part of the drive device or drive unit 10, which drive unit 10 here again comprises the electric motor 11 and the worm gear 9 (Andersen reference, column 7, lines 25 and 26). The drive shaft of the revolving door 1 is connected form matching and force matching with the worm gear 9 (Andersen reference, column 7 lines 27 to 29). In clear contrast, the output shaft of the brushless DC servomotor of the present application is connected directly to the drive shaft of the barrier element 2 and without any intermediate gear.

The dispensing of a gear drive between the output shaft of the brushless DC servomotor 5 and the drive shaft for the barrier element 2 becomes possible according to the present invention by a servo controller,

which is coordinated to the DC servomotor 5. The control unit 50 according to the reference Andersen is associated with a different purpose. The control unit 50 of the Andersen reference is connected to the sensors 15, which allow to determine if a person enters the revolving door or leaves the revolving door, that is the revolving door is to be set into motion or is set to a stop (Andersen reference, column 7, line 9 following).

Therefore, claim 1 cannot be considered anticipated or rendered obvious by the Andersen reference. Claim 1 is clearly novel and also inventive in view of the Andersen reference.

With respect to claim 2, Andersen teaches a compact complete control device which comprises the servo controller (fig. 9, 50) and a logic section (fig. 9, 52) and a housing (fig. 3, 18), and which serves to control (column 7, lines 5-15) the motor as a function of signals.

Claim 2 refers back to claim 1 and concerns a particularly advantageous embodiment of the servo controller coordinated to the brushless DC servomotor, wherein the servo controller has a different function compared with the control unit 50 according to the Andersen reference as mentioned above. According to the reference Andersen, column 7, lines 9 to 11 "Here, the control unit 50 is connected to the sensors 15 so as to be able to detect the presence of a person entering or exiting the revolving door,". Claim 2 of the present application requires that "the servo controller

and a logic section and a housing, and which serves to control the motor (5)".

Claim 2 as amended further requires: "and wherein a rotation axis of the output shaft of the DC servo motor (5) coincides with an axis of the drive shaft of the barrier element (2)".

In clear contrast to this additional requirement of claim 2 of the present application, Figure 6 of the reference Andersen shows that the axis of the electric motor 11 is separate from the axis of the shaft 8 for rotating the rotating part 1 of the revolving door.

With respect to claim 11, Andersen teaches in that a linkage (fig. 3,14) can be interconnected between the servo motor and the barrier element which is to be moved (column 5, lines 45-62).

As to patentability of claim 11, applicant relies on the features set forth in claim 1 on which claim 11 depends.

With respect to claim 12, Andersen teaches in that a step-down gear mechanism (fig. 3, 9) and a linkage (fig. 3,12) can be interconnected between the servo motor and the element which is to be moved (column 5, lines 45-62).

No reference numeral "12" is seen in Fig. 3 of the reference Andersen. The reference Andersen shows the reference numeral "12" in Figs.1, 4, and 5. Column 4, lines 60 to 62 of the Andersen reference says: "to which a face band 12 is adjacent, which continues up to the ceiling of the building.". Reference numeral "12" of the reference Andersen clearly

does not designate a linkage in contrast to the allegation of the Office Action.

The Office Action refers to Claim Rejections - 35 USC § 103

Claims 3-10,13, and 14, stand rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen (US 5,773,943) in view of Becker (US 5,245,258).

Applicant respectfully traverses.

Each of the references Andersen and Becker et al. has its own approach, which makes it very difficult to furnish a sensible combination of the two references. First the references are directed to different devices: Andersen teaches a drive device for a revolving door, whereas the reference Becker et al. teaches an electrically powered power window unit. The control unit 50 of the Andersen reference differs substantially from the plug-in module 5 and from the plug-in element 6 of the reference Becker et al. The transmission of rotary power is performed differently in the reference Andersen than in the reference Becker et al. There are no suggestions within the four corners of the references Andersen and Becker et al. as to how their individual teachings could be combined.

With respect to claim 3, Andersen does not teach characterized in that the logic section is designed as a pluggable logic circuit board. Becker teaches in that the logic section is designed as a pluggable logic (fig. 2, 5) circuit board. It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board to the motor control system of Anderson for the advantage of to accomplish an easily

installed assembly which can be programmed as desired, as taught by Becker (column 5, lines 49-55; column 7, lines 34-52).

Claim 3 of the instant application requires that "the logic section is designed as a pluggable logic circuit board.". A servo controller is separately furnished according to claim 2 of this application and claim 3 depends on claim 2. The reference Becker et al. teaches in column 5, lines 49 to 54: "The plug-in module 5 consists of a plug-in element 6, on which the electronic control and regulating system 4, including a micro-computer 40, are mounted. The micro-computer can be programmed as desired, depending on the motor vehicle type in which it is installed.".The electronic control and regulating system 4 according to the reference Becker et al. would be in addition to the servo controller required according to claim 2. It is respectfully submitted that a person of ordinary skill in the art would not provide the electronic control and regulating system 4 on the plug-in module 5 in addition to the servo controller of claim 2.

The Office Action notes that the claims 3 to 10,13 and 14 are not anticipated by the Andersen reference, but claims 3 to 10,13 and 14 are considered to be obvious in view of the reference Becker et al. The reference Becker et al. concerns an electrically operated drive system for lifting and lowering windows in motor vehicles. A person of ordinary skill in the art would notice immediately that such a drive device for windows has completely different requirements as the driving device for passage gates

according to the present invention. In addition, the drive device for windows according to Becker et al. is so different from the drive device of a revolving door according to Andersen that a person of ordinary skill in the art would not know how to combine them. The reference Becker et al. makes reference to a state of the art with a drive motor 2 comprising an electric motor 21 and the transmission 22 connected to the electric motor 21 (reference Becker et al., column 1, lines 43 to 45). It is an object of the drive device for lowerable and pivotable windows in motor vehicles to be of compact construction, to be simple in production and installation, not to be sensitive against humidity, and to be employable with different vehicle types, compare for example the reference Becker et al., column 2, lines 56 following. The proper drive unit according to the state-of-the-art comprising the electric motor 21 and the transmission 22 is maintained in the solution of the object proposed for all embodiments according to the reference Becker et al. (reference Becker et al., column 5, line 29 and figure 2, column 6, line 66, column 7, line 26). An essential part of the teaching of the reference Becker et al. is a module 5 which contains an electronic control and automatic control system and insertable into the casing of this drive unit, wherein the electronic control and automatic control system enables a lifting of the window and a lowering of the window and the maintenance of the

window in the two final positions as well as in each intermediate position. Here such a control and automatic control system was already known as disposed outside of the casing of the drive unit (reference Becker et al., column 1, line 43 following). The drive unit proper is not subject of the invention according to the reference Becker et al.. It is nowhere suggested in the reference Becker et al. that a drive unit could dispense with a transmission and that the output shaft of the motor could be connected directly to the drive shaft of the barrier element.

With respect to claim 4, Andersen does not teach that different logic circuit boards can be plug-connected, different movement profiles and programs which

are directed at various applications are prespecified on said logic circuit boards, and said logic circuit boards have different numbers of inputs and outputs and different operator control and display elements, depending on requirements. Becker teaches different logic circuit boards can be plug-connected, different movement profiles and programs which are directed at various applications are prespecified on said logic circuit boards, and said logic circuit boards have different numbers of inputs and outputs and different operator control and display elements, depending on requirements (column 5, lines 49-55; column 7, lines 46-52). It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board that has the advantage of being able to be programmed as desired, as taught by Becker (column 5, lines 49-55).

As set forth above in connection with claim 3, the reference Becker et al. teaches that the plug-in module 5 consists of a plug-in element on

which the electronic control and regulating system 4, including a micro-computer 40, are mounted. Thus an electronic control and regulating system 4 would have to be provided on each plug-in module 5. This is clearly different from the requirement of claim 4 that different logic circuit boards can be plug-connected. A person of ordinary skill in the art would avoid providing an additional electronic control and regulating system 4 through a plug-in module, where already a servo controller is present from claim 2.

With respect to claim 5, Andersen does not teach a transmitter system which is integrated in the motor and supplies the required control signals. Becker teaches teach a transmitter system (fig. 2,4) which is integrated in the motor and supplies the required control signals (column 5, lines 49-55). It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board/control system that has the advantage of being able to be programmed as desired, as taught by Becker (column 5, lines 49-55).

Claim 5 of the present application requires a transmitter system which is integrated in the motor and which supplies the required control signals. The plug-in module 5 of the reference Becker et al. is not specified to supply any control signals. The electronic control and regulating system 4 of the Becker et al. reference is not integrated with the electric motor 21. As the electric control and regulating system is located on the plug-in module 5 and as the plug-in module 5 is not integrated with the electric motor 21 according to the Becker et al reference, column6, lines 10 to 18: "To install the electrically powered power window unit assembly with integrated

electronic control and regulating system and speed sensor, it is only necessary to insert the plug-in module 5 in the direction of the arrow into the respective opening in the common housing 1 until contact is made with a stop or lug, whereby in this position, the exterior surface 8 of the plug-in module 5 forms a flush closure with the exterior wall of the common housing 1.". The insertion of the plug-in module 5 into the respective opening in the common housing 1 means that the electronic control and regulating system 4 is not integrated with the motor 21.

With respect to claim 6, Andersen and Becker do not teach in that the motor mount is formed as a fixed mount on the side of the transmitter system. Becker discloses the claimed invention except for the fixed mount. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the circuit assembly fixed, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works,* 150 U.S. 164 (1993).

Applicant respectfully submits that claim 6 not only specifies a fixed mount, but also the position on the side of the transmission system.

With respect to claim 7, Andersen does not teach in that the transmitter system is connected to the motor plate by means of plug connection or clamping. Becker teaches the transmitter system is connected to the motor plate (fig. 2,26) by means of plug connection (fig. 2,11, 12; column 6, lines 45-51) or clamping. It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board that has the advantage of being able to be programmed as desired, as taught by Becker (column 5, lines 49-55).

According to the reference Becker et al., column 6, line 65 the element 26 is a connector 26 of the common housing 1. There is no motor plate seen in the reference Becker et al. There is no teaching in the reference Becker et al. of a transmitter connected to a motor plate, where the alleged motor plate is a renamed connector 26. It is further submitted that a pluggable logic board is not a transmitter.

With respect to claim 8, Andersen does not teach in that the plug connection is designed to be secure against polarity reversal and is provided with a locking means. Becker teaches the plug connection is designed to be secure against polarity reversal and is provided with a locking means (column 7, lines 46-52). It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board that has the advantage of being able to be programmed as desired such as locking means, as taught by Becker (column 5, lines 49-55).

Applicant respectfully disagrees. It is not recognized where the reference Becker et al. teaches a plug connection constructed secure against polarity reversal. The locking unit 6 according to the present application is specified in US Patent Application Publication 2007/0246324 A1, paragraph [17], lines 8 to 12: "In addition to the motor 5, a locking unit 6 is provided for safe operation, said locking unit holding the barrier element securely in its closed position and its open position and allowing the motor 5 and, respectively, the barrier element 2 to stop in any position.". In clear contrast, the reference Becker et al. in column 7, lines 50 to 52 considers possible "a combination of window controls with a central locking system", which is clearly different from the locking unit of the present application.

With respect to claim 9, Anderson does not teach a commutation and position control in the motor are performed by means of a magnetoresistive sensor. Becker teaches a commutation and position control (column 6, lines 25-40) in the motor are performed by means of a magnetoresistive sensor (column 6, lines 25-27;"inductive measuring device"). It would have been obvious to one having ordinary skill in the art at the time of the invention to include a sensor to provide the advantage of getting feedback of speed/position signals, as taught by Becker.

With respect to claim 10, Andersen does not teach commutation and position control in the motor are performed by means of resolvers or encoders or Hall sensors. Becker teaches a commutation and position control (column 6, lines 25-40) in the motor are performed by means of resolvers or encoders or Hall sensors (fig. 2,31,32).

As to patentability of claims 9 and 10, applicant relies on the features set forth in claim 1 on which claims 9 and 10 depend.

With respect to claim 13, Andersen does not teach in that the inputs and outputs are separate from the actual motor control system/logic circuit board and designed as an independent module. Becker teaches the inputs and outputs are separate from the actual motor control system (fig. 2,22)/logic circuit board and designed as an independent module (fig. 2, 6). It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board with various input/outputs that has the advantage of being able to be programmed as desired, as taught by Becker (column 5, lines 49-55).

The language of the Office Action is not understood as follows: "Becker teaches the inputs and outputs are separate from the actual motor control system (fig. 2,22)/logic circuit board and designed as an independent module

(fig. 2, 6).". The element 22 is described in the reference Becker et al., column 1, lines 44 to 47 as follows: "with an electric motor 21 and a connected transmission 22, which is connected by means not shown here to the cable loop for raising and lowering the window.". The transmission 22 is apparently a mechanical transmission. It is not understood what a mechanical transmission (Fig. 2,22) has to do with an actual motor control system as alleged in the Office Action.

Claim 13 requires that the inputs and outputs are separate from the actual motor control system/logic circuit board and designed as an independent module. The reference Becker et al. describes in column 5, lines 49 to 55 a "plug-in module 5 consisting of a plug-in element 6, on which the electronic control and regulating system 4, including a micro-computer 40, are mounted.". There is nothing said in the reference Becker et al. that the inputs and outputs are separate from the actual motor control system/logic circuit board and form an independent module. A pluggable logic board with various input/outputs does not imply that the inputs and outputs are separate from the actual motor control system/ logic circuit board and form an independent module.

With respect to claim 14, Andersen does not teach in that the inputs and outputs can be connected by a pluggable bus connection or a pluggable, multicore cable. Becker teaches the inputs and outputs can be connected by a pluggable bus connection or a pluggable, multicore cable (column 7, lines 10-52). It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board with multiple pins/cables/control signals

that has the advantage of being able to be programmed, as taught by Becker (column 5, lines 49-55).

As to patentability of claim 14, applicant relies on the features set forth in claim 13 on which claim 14 depends.

Applicant respectfully submits that the references Andersen and Becker et al. show numerous features and that the rejections expressed clearly amount to a picking and choosing of features in view of the present application.

Other References

The German printed Patent document DE 10019967 A1 to Lais describes a blocking and closure device with a drive unit, which comprises a control unit, a drive motor and an intermediately disposed transmission (reference Lais, claim 1, column 8, lines 56 and 57). The drive motor is preferably a brushless DC motor, which is followed by at least one step down transmission and thereupon following at least one four hinged drive or is followed by a member transferring in another way rotary or translatory force (reference Lais, column 5, lines 7 to 11). Spring motors can be furnished for receiving mass inertia and weight moments, which spring motors are hinged between two arbitrary transmission members or between a drive member and the casing (reference Lais, column 5, lines 11 to 18). The

reference Lais does not contain any suggestion to dispense completely with the transmission and to connect the output shaft of the drive motor directly with the drive shaft of the blocking or closure element; on the contrary at least one step down transmission and at least one four hinged transmission are required at any rate according to the reference Lais. The disadvantages, which are associated with a step down transmission and a following coupling drive, namely expensive and cost intensive production, susceptibility to wear and interferences, therefrom resulting frequent and cost intensive maintenance work and repair work have already been presented in the introduction of the description of the present application (present application, p. 2, lines 4 to 16 and p. 2, line 32 to p. 3,line 2). It is also stated there which particular and high requirements have to be met by a passage or a thoroughfare barrier, in particular also because of the person transfer, and why step down transmissions and coupling drives are more preventing of an optimum solution. Reference is being made to the introduction of the description of the present application, WO 2005/049948 A1, p. 2, line 22 to p. 3, line 26.

The reference European patent application EP 0617188 A1 describes a swivel door with a door panel 6 swivelable around a vertical axis, wherein the drive of the door panel 6 is performed through an electric motor 22,

wherein the output shaft 23 of the electric motor 22 is connected rotation matching with an intermediate piece 24', wherein the intermediate piece 24' engages into a coupling 24 on the input side, whereas on the output side a stub 25 projecting from the coupling 24 is connected rotation matching with the drive shaft 26 of the door panel 6 (reference EP 0617188 A1, column 3, lines 9 to 19). A breaking device 29 formed as a two parts magnet brake arrests the door panel 6 in the end positions (reference EP 0617188 A1, column 6 lines 42 and 43 and column 7, lines 35 following).

The reference EP 0617188 A1, column 3, lines 20 to 23 contains a short suggestion that the coupling 24 does not have to be present necessarily, but that the output shaft 23 of the electric motor 22 can be directly and form matchingly connected to the drive shaft 26. This is however immediately again restricted with the suggestion that it is advantageous to furnish a coupling 24, wherein the coupling 24 is constructed such that it is capable to act dampingly on the starting moment of the electric motor 22 and on the breaking moment of the electric motor 22 in order to exclude a beating of the door panel 6 during the swiveling process (reference EP 0617188 A1, column 3, lines 23 to 29). The present invention excludes a beating of the barrier element 2 with the servo controller coordinated to the brushless DC servomotor. In contrast to the present invention, the reference EP 0617188

A1 suggests only possibly to dispense with a coupling, a transmission is not mentioned as well as the kind of the electric motor and in particular how the required high torques and the desired small rotation speeds can be obtained at the drive shaft of the barrier element, independent if a coupling is applied or not.

The proper subject matter of the reference EP 0617188 A1 is not the drive for a swivel door but instead the constructive building of the swivel door. The drive is mentioned only in general terms, sure and more incidental in the reference EP 0617188 A1, column 3, lines 7 to 29 and is designated in the complete document overall and generally as electric motor; there is no suggestion as to the kind of the electric motor and no suggestion how the special requirements for drive devices in case of passage barriers or through barriers are to be met, for example with regard to speed, security and personal protection, long lifetime with high continuous load.

The subject matter of the reference EP 0617188 A1 is as was mentioned the constructive building of a swivel door, wherein the presence of a drive is in fact mentioned, however the kind of drive is not of importance in connection with the claimed invention and corresponds apparently to a pre-known state of the art. A person of ordinary skill in the

art has to start with the fact that high torques and low rotation speeds and a good automatic control are required for passage barriers and thoroughfare barriers. Since these requirements cannot be fulfilled with the usual electric motor, independent if AC or DC motor, the conclusion remains with a person of ordinary skill in the art that the concept "electric motor" here refers to a transmission motor, that is a drive unit which comprises an electric motor and a following transmission. Such a shortened use of the concept is usual in such contexts were certain details of the drive are unimportant such as in the reference EP 0617188. The question of a direct drive, that is a motor without transmission, is not at all posed in this document, it is only said that the "electric motor" (or properly the drive) can be coupled directly with the barrier element also without a coupling.

The requirements of claim 1 of the present application, namely to coordinate a servo controller to a brushless DC servomotor (5) and to connect directly the output shaft of the DC servomotor to the drive shaft of the barrier element (2) cannot be gathered from the reference EP 0617188 A1 and is not suggested since the reference EP 0617188 A1 does not in detail refer to the kind of the drive.

The requirements of the claim 1 are not only new but also inventive relative to the applied state of the art. The statements above made it clear how unobvious this teaching was at the time of the invention for a person of ordinary skill in the art, which considerations were necessary to furnish the invention solution and to overcome the presented problems and difficulties.

The advantages associated with the present invention are self-evident: the new drive device is quicker to react, opening motions and closure motions which can run faster and as required, for example if the personal protection requires motions can also be quicker interrupted and revised, component parts subject to high were can be dispensed with, which leads to less maintenance work and less repair work, production costs and installation costs are lowered. The rotation speed and the torque can be exactly automatically controlled and can be worldwide adapted to the most different requirements at differing situations of use through the servo controller. Motion profiles such as soft accelerating and breaking in the final positions can be predetermined. A hard impact or over swinging in the final positions can be thus avoided without that a special breaking device, for example in the shape of a magnet brake according to the reference EP 0617188 A1, has to be furnished.

Reconsideration of all outstanding rejections is respectfully requested.

All claims as presently submitted are deemed to be in form for allowance and an early notice of allowance is earnestly solicited.

Respectfully submitted,

Lothar Lais

By: _____
Horst M. Kasper, his attorney,
13 Forest Drive, Warren, N.J. 07059

Tel.:(908)526-1717 Fax:(908)526-6977
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Rep/am